

## Refine Search

### Search Results -

Term	Documents
SINGLE	3491822
SINGLES	3303
CHAIN	1120705
CHAINS	315352
ANTIBODY	174560
ANTIBODIES	148668
ANTIBODYYS	38
(9 AND (SINGLE ADJ CHAIN ADJ ANTIBODY)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	14
(L9 AND ((SINGLE ADJ CHAIN) ADJ ANTIBODY) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	14

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L10

Refine Search

Recall Text

Clear

Interrupt

### Search History

 DATE: Thursday, May 05, 2005    [Printable Copy](#)    [Create Case](#)

 Set Name    Query  
 side by side

Hit Count

 Set  
 Name  
 result set

 DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES;  
 OP=AND

L10    L9 and ((single adj chain) adj antibody)

14

L10

L9    L8 and (sc-Ab or antibody)

23

L9

<u>L8</u>	L7 and (pIIIa or pIX)	25	<u>L8</u>
<u>L7</u>	L6 and (adenoviral or adenovirus)	323	<u>L7</u>
<u>L6</u>	(modified or modifying or modification) same (capsid adj protein)	549	<u>L6</u>
<u>L5</u>	L3 not L4	1	<u>L5</u>
<u>L4</u>	L3 and (adenovirus or adenoviral)	10	<u>L4</u>
<u>L3</u>	(pIIIa or pIX) near (modified or modification)	11	<u>L3</u>
<u>L2</u>	L1 and (pIIIa or PIX)	5	<u>L2</u>
<u>L1</u>	Curiel-David-T\$.in.	68	<u>L1</u>

END OF SEARCH HISTORY

## Welcome to DialogClassic Web(tm)

Dialog level 05.02.01D  
Last logoff: 28apr05 12:18:06  
Logon file001 05may05 15:19:55

## \*\*\* ANNOUNCEMENT \*\*\*

\*\*\*

--Important Notice to Freelance Authors--  
See HELP FREELANCE for more information

\*\*\*

## NEW FILES RELEASED

\*\*\*FDAnews (File 182)  
\*\*\*German Patents Fulltext (File 324)

\*\*\*Beilstein Abstracts (File 393)  
\*\*\*Beilstein Facts (File 390)  
\*\*\*Beilstein Reactions (File 391)

\*\*\*

## RELOADED

\*\*\*Medline (Files 154 & 155)  
\*\*\*ToxFile (File 156)

## RESUMED UPDATING

\*\*\*Canadian Business and Current Affairs (262)  
\*\*\*CorpTech (559)

\*\*\*

## REMOVED

\*\*\*Health News Daily (43)  
\*\*\*FDC Reports Gold Sheet/Silver Sheet (184)  
\*\*\*FDC Reports (186/187)  
\*\*\*NDA Pipeline: New Drugs (189)

\*\*\*

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<  
>>> of new databases, price changes, etc. <<<

\*\*\*\*

KWIC is set to 50.

HIGHLIGHT set on as ' '

\* \* \*

File 1:ERIC 1966-2004/Jul 21  
(c) format only 2004 The Dialog Corporation  
\*File 1: Updates suspended by ERIC until  
Q2, 2005

Set	Items	Description
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Cost is in DialUnits

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B 155, 159, 5, 73  
05may05 15:20:10 User259876 Session D747.1  
\$0.81 0.230 DialUnits File1  
\$0.81 Estimated cost File1  
\$0.06 INTERNET  
\$0.87 Estimated cost this search  
\$0.87 Estimated total session cost 0.230 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 155:MEDLINE(R) 1951-2005/May W1  
(c) format only 2005 The Dialog Corp.  
File 159:Cancerlit 1975-2002/Oct

(c) format only 2002 Dialog Corporation

**\*File 159: Cancerlit is no longer updating.**

Please see HELP NEWS159.

File 5: Biosis Previews(R) 1969-2005/May W1

(c) 2005 BIOSIS

File 73: EMBASE 1974-2005/May W1

(c) 2005 Elsevier Science B.V.

Set	Items	Description
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?

S (MODIFIED OR MODIFICATION OR MODIFYING) (S) (CAPSID (W) PROTEIN)

534440 MODIFIED

335041 MODIFICATION

64590 MODIFYING

40194 CAPSID

4492181 PROTEIN

S1 405 (MODIFIED OR MODIFICATION OR MODIFYING) (S) (CAPSID (W) PROTEIN)

?

S S1 AND (ADENOVIRUS OR ADENOVIRAL)

405 S1

85522 ADENOVIRUS

20427 ADENOVIRAL

S2 22 S1 AND (ADENOVIRUS OR ADENOVIRAL)

?

RD

...completed examining records

S3 11 RD (unique items)

?

S S3 AND (PIIIA OR PIX)

11 S3

42 PIIIA

648 PIX

S4 3 S3 AND (PIIIA OR PIX)

?

T S4/3,K/ALL

**4/3,K/1 (Item 1 from file: 155)**

DIALOG(R) File 155:MEDLINE(R)

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16314688 PMID: 15296675

**Fluorescently labeled** adenovirus with pIX-EGFP for vector detection. □

Le Long P; Everts Maaike; Dmitriev Igor P; Davydova Julia G; Yamamoto Masato; Curiel David T

University of Alabama, Birmingham, USA.

Molecular imaging - official journal of the Society for Molecular Imaging (United States) Apr 2004, 3 (2) p105-16, ISSN 1535-3508

Journal Code: 101120118

Contract/Grant No.: P50 CA83591; CA; NCI; R01 CA83821; CA; NCI; R01 CA93796; CA; NCI; R01 CA94084; CA; NCI; R01 DK063615; DK; NIDDK; R01 HL67962-3; HL; NHLBI

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: MEDLINE; Completed

**Fluorescently labeled adenovirus with pIX-EGFP for vector detection.**  
... achieve cell-specific gene delivery. Current detection strategies, including reporter gene expression, viral component detection, and vector labeling with fluorophores, have been applied to analyze **adenoviral** vectors; however, these methods are inadequate for assessing transductional targeting. As an alternative to conventional vector detection techniques, we developed a specific genetic labeling system whereby an **adenoviral** vector incorporates a fusion between capsid protein IX and EGFP. DNA packaging and thermostability were marginally hampered by the **modification** while DNA replication, cytopathic effect, and CAR-dependent binding were not affected. The fluorescent label was associated with the virus capsid and conferred a fluorescent property useful in detecting **adenoviral** particles in flow cytometry, tracking, and tissue sections. We believe our genetic **adenovirus** labeling system has important implications for vector development, detecting **adenovirus** vectors in targeting schemes, and studying **adenovirus** biology. In addition, this technique has potential utility for dynamic monitoring of **adenovirus** replication and spread.

; **Adenovirus** El Proteins--genetics--GE; Adenoviruses, Human--genetics--GE; Adenoviruses, Human--isolation and purification--IP; Animals; CHO Cells; Capsid Proteins--genetics--GE; Cell Line...

Chemical Name: **Adenovirus** El Proteins; Capsid Proteins; Genetic Vectors  
; Green Fluorescent Proteins

4/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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15242549 PMID: 15016870

**Spacers increase the accessibility of peptide ligands linked to the carboxyl terminus of adenovirus minor capsid protein IX.**

Vellinga Jort; Rabelink Martijn J W E; Cramer Steve J; van den Wollenberg Diana J M; Van der Meulen Hans; Leppard Keith N; Fallaux Frits J; Hoebe Rob C

Department of Molecular Cell Biology, Leiden University Medical Centre, 2333 AL Leiden, The Netherlands.

Journal of virology (United States) Apr 2004, 78 (7) p3470-9, ISSN 0022-538X Journal Code: 0113724

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**Spacers increase the accessibility of peptide ligands linked to the carboxyl terminus of adenovirus minor capsid protein IX.**

The efficiency and specificity of gene transfer with human **adenovirus** (hAd)-derived gene transfer vectors would be improved if the native viral tropism could be modified. Here, we demonstrate that the minor **capsid protein IX** ( **pIX** ), which is present in 240 copies in the Ad capsid, can be exploited as an anchor for heterologous polypeptides. Protein IX-deleted hAd5 vectors were propagated in hAd5 helper cells expressing **pIX** variants, with heterologous carboxyl-terminal extensions of up to 113 amino acids in length. The extensions evaluated consist of alpha-helical spacers up to 75 A in length and to which peptide ligands were fused. The **pIX** variants were efficiently incorporated into the capsids of Ad particles. On

intact particles, the MYC-tagged- **PIX** molecules were readily accessible to anti-MYC antibodies, as demonstrated by electron microscopic analyses of immunogold-labeled virus particles. The labeling efficiency improved with increasing...

... the spacers lift and expose the ligand at the capsid surface. Furthermore, we found that the addition of an integrin-binding RGD motif to the **PIX** markedly stimulated the transduction of coxsackievirus group B and hAd receptor-deficient endothelioma cells, demonstrating the utility of **PIX** **modification** in gene transfer. Our data demonstrate that the minor **capsid protein IX** can be used as an anchor for the addition of polypeptide ligands to Ad particles.

Chemical Name: Capsid Proteins; Ligands; Receptors, Virus; Recombinant Fusion Proteins; hexon capsid protein, **Adenovirus**

4/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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14266029 PMID: 12072490

**Engineering of adenovirus vectors containing heterologous peptide sequences in the C terminus of capsid protein IX.**

Dmitriev Igor P; Kashentseva Elena A; Curriel David T

Division of Human Gene Therapy, Department of Medicine, University of Alabama at Birmingham, Birmingham, Alabama 35294-3300, USA.

Journal of virology (United States) Jul 2002, 76 (14) p6893-9,

ISSN 0022-538X Journal Code: 0113724

Contract/Grant No.: N01 CO-97110; PHS; P50 CA89019; CA; NCI; R01 CA68245; CA; NCI; R01 CA74242; CA; NCI; R01 CA86881; CA; NCI; R01 CA90547; CA; NCI; R01 HL67962; HL; NHLBI

Publishing Model Print

Document type: Evaluation Studies; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

**Engineering of adenovirus vectors containing heterologous peptide sequences in the C terminus of capsid protein IX.**

The utility of the present generation of **adenovirus** (Ad) vectors for gene therapy applications could be improved by restricting native viral tropism to selected cell types. In order to achieve modification of Ad tropism, we proposed to exploit a minor component of viral **capsid protein IX** (**PIX**), for genetic incorporation of targeting ligands. Based on the proposed structure of **PIX**, we hypothesized that its C terminus could be used as a site for incorporation of heterologous peptide sequences. We engineered recombinant Ad vectors containing **modified PIX** carrying a carboxy-terminal Flag epitope along with a heparan sulfate binding motif consisting of either eight consecutive lysines or a polylysine sequence. Using an anti-Flag antibody, we have shown that **modified PIXs** are incorporated into virions and display Flag-containing C-terminal sequences on the capsid surface. In addition, both lysine octapeptide and polylysine ligands were...

... octapeptide, Ad vector displaying a polylysine was capable of recognizing cellular heparan sulfate receptors. We have demonstrated that incorporation of a polylysine motif into the **PIX** ectodomain results in a significant augmentation of Ad fiber knob-independent infection of CAR-deficient cell types. Our data suggest that the **PIX** ectodomain can serve as an alternative to the fiber knob, penton base, and hexon proteins

for incorporation of targeting ligands for the purpose of Ad tropism  
**modification** .

Chemical Name: Capsid Proteins; Genetic Vectors; Ligands; Peptides; hexon  
 capsid protein, **Adenovirus** ; FLAG peptide  
 ?

Set	Items	Description
S1	405	(MODIFIED OR MODIFICATION OR MODIFYING) (S) (CAPSID (W) PR- OTEIN)
S2	22	S1 AND (ADENOVIRUS OR ADENOVIRAL)
S3	11	RD (unique items)
S4	3	S3 AND (PIIIA OR PIX)

?

S (PIIIA OR PIX) (S) ((SC-AB) OR (SINGLE (W) CHAIN (W) ANTIBODY))

42	PIIIA
648	PIX
0	SC-AB
1961708	SINGLE
1150457	CHAIN
1358931	ANTIBODY
2368	SINGLE (W) CHAIN (W) ANTIBODY
S5	1 (PIIIA OR PIX) (S) ((SC-AB) OR (SINGLE (W) CHAIN (W) ANTIBODY))

?

T S5/3,K/ALL

**5/3,K/1 (Item 1 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)

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0014297348 BIOSIS NO.: 200300256067

# **Capsid-modified recombinant adenovirus and methods of use**

AUTHOR: Curiel David T (Reprint)

JOURNAL: Official Gazette of the United States Patent and Trademark Office  
 Patents 1269 (5): Apr. 29, 2003 2003

MEDIUM: e-file

PATENT NUMBER: US 6555368 PATENT DATE GRANTED: April 29, 2003 20030429

PATENT CLASSIFICATION: 435-3201 PATENT ASSIGNEE: UAB Research Foundation

PATENT COUNTRY: USA

ISSN: 0098-1133 (ISSN print)

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The present invention describes a recombinant adenoviral vector in which a single-chain antibody has been introduced into the minor capsid proteins, pIIha or **PIX** , so that the adenoviral vector can be targeted to a particular cell type. Additionally disclosed is a method of using the recombinant adenoviral vector in...

?

Set	Items	Description
S1	405	(MODIFIED OR MODIFICATION OR MODIFYING) (S) (CAPSID (W) PR- OTEIN)
S2	22	S1 AND (ADENOVIRUS OR ADENOVIRAL)
S3	11	RD (unique items)

S4 3 S3 AND (PIIIA OR PIX)  
S5 1 (PIIIA OR PIX) (S) ((SC-AB) OR (SINGLE (W) CHAIN (W) ANTIB-  
ODY))  
?

## COST

05may05 15:25:26 User259876 Session D747.2  
\$2.26 0.707 DialUnits File155  
\$0.63 3 Type(s) in Format 3  
\$0.63 3 Types  
\$2.89 Estimated cost File155  
\$0.46 0.155 DialUnits File159  
\$0.46 Estimated cost File159  
\$3.07 0.534 DialUnits File5  
\$2.00 1 Type(s) in Format 3  
\$2.00 1 Types  
\$5.07 Estimated cost File5  
\$5.02 0.472 DialUnits File73  
\$5.02 Estimated cost File73  
OneSearch, 4 files, 1.868 DialUnits FileOS  
\$1.60 INTERNET  
\$15.04 Estimated cost this search  
\$15.91 Estimated total session cost 2.098 DialUnits

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